Xiao-Tao Hao

List of Publications by Year in Descending Order

186 papers	5,065 citations	36 h-index	65 g-index
199 ext. papers	6,847 ext. citations	8.1 avg, IF	6.09 L-index

#	Paper	IF	Citations
186	Rationalizing charge carrier transport in ternary organic solar cells. *Applied Physics Letters*, **2022**, 120, 023302	3.4	1
185	Reducing Limitations of Aggregation-Induced Photocarrier Trapping for Photovoltaic Stability via Tailoring Intermolecular Electron–Phonon Coupling in Highly Efficient Quaternary Polymer Solar Cells (Adv. Energy Mater. 6/2022). *Advanced Energy Materials*, **2022**, 12, 2270023	21.8	
184	Reproducibility in Time and Space-The Molecular Weight Effects of Polymeric Materials in Organic Photovoltaic Devices.. *Small Methods*, **2022**, e2101548	12.8	2
183	Reducing Limitations of Aggregation-Induced Photocarrier Trapping for Photovoltaic Stability via Tailoring Intermolecular Electron–Phonon Coupling in Highly Efficient Quaternary Polymer Solar Cells. *Advanced Energy Materials*, **2022**, 12, 2103371	21.8	8
182	Bandgap matching strategy for organic photovoltaic cells in oceanic applications. *Cell Reports Physical Science*, **2022**, 100861	6.1	
181	An Aggregation-Suppressed Polymer Blending Strategy Enables High-Performance Organic and Quantum Dot Hybrid Solar Cells.. *Small*, **2022**, e2201387	11	1
180	Single-Junction Organic Solar Cells with 19.17% Efficiency Enabled by Introducing One Asymmetric Guest Acceptor.. *Advanced Materials*, **2022**, e2110147	24	71
179	Vertically optimized phase separation with improved exciton diffusion enables efficient organic solar cells with thick active layers.. *Nature Communications*, **2022**, 13, 2369	17.4	23
178	Observing halogen-bond-assisted electron transport in high-performance polymer solar cells. *Applied Physics Letters*, **2021**, 119, 183302	3.4	1
177	V OC variation with different molecular weight fractions in highly efficient organic photovoltaic bulk heterojunctions. *Journal Physics D: Applied Physics*, **2021**, 54, 035106	3	
176	High-Performance Non-Fused Wide Bandgap Acceptor for Versatile Photovoltaic Applications. *Advanced Materials*, **2021**, e2108090	24	13
175	Baseplate Temperature-Dependent Vertical Composition Gradient in Pseudo-Bilayer Films for Printing Non-Fullerene Organic Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2102135	21.8	9
174	Tunable Grain Boundary of Lead-Free All-Inorganic Perovskite Films for Smart Photodetectors. *Advanced Materials Interfaces*, **2021**, 8, 2101339	4.6	2
173	Suppressing Kinetic Aggregation of Non-Fullerene Acceptor via Versatile Alloy States Enables High-Efficiency and Stable Ternary Polymer Solar Cells. *Advanced Functional Materials*, **2021**, 31, 2100316	15.6	18
172	Recent progress of PM6:Y6-based high efficiency organic solar cells. *Surfaces and Interfaces*, **2021**, 23, 100921	4.1	25
171	Organic indoor light harvesters achieving recorded output power over 500% enhancement under thermal radiated illuminances. *Science Bulletin*, **2021**, 66, 1641-1641	10.6	3
170	Organic chiral ferromagnets with strong spin-chiroptical interactions. *Cell Reports Physical Science*, **2021**, 2, 100442	6.1	1

169	Non-Fullerene Acceptors: Suppressing Kinetic Aggregation of Non-Fullerene Acceptor via Versatile Alloy States Enables High-Efficiency and Stable Ternary Polymer Solar Cells (Adv. Funct. Mater. 20/2021). *Advanced Functional Materials*, **2021**, 31, 2170141	15.6	1
168	Influence of donor:acceptor ratio on charge transfer dynamics in non-fullerene organic bulk heterojunctions. *Chinese Chemical Letters*, **2021**, 32, 529-534	8.1	3
167	Exploring the mechanisms of exciton diffusion improvement in ternary polymer solar cells: From ultrafast to ultraslow temporal scale. *Nano Energy*, **2021**, 79, 105513	17.1	13
166	Synergistic effect of incorporating intra- and inter-molecular charge transfer in nonfullerene acceptor molecules for highly-efficient organic solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 16834-16840	12	7
165	Chemical vapor deposition growth of phase-selective inorganic lead halide perovskite films for sensitive photodetectors. *Chinese Chemical Letters*, **2021**, 32, 489-492	8.1	4
164	One-micron-thick organic indoor light harvesters with low photocurrent loss and fill factors over 67%. *Journal of Materials Chemistry A*, **2021**, 9, 13515-13521	13	5
163	Chromaticity manipulation of indoor photovoltaic cells. *Applied Physics Letters*, **2021**, 118, 043301	3.4	5
162	Giant Nonlinear Optical Response of Lead-Free All-inorganic CsSnBr3 Nanoplates. *Journal of Physical Chemistry C*, **2021**, 125, 803-811	3.8	4
161	Efficient photoluminescence enhancement and tunable photocarrier transfer in vertical 2D organic–inorganic heterostructure by energy funneling. *2D Materials*, **2021**, 8, 025026	5.9	2
160	Suppressing trap states and energy loss by optimizing vertical phase distribution through ternary strategy in organic solar cells. *Science China Chemistry*, **2021**, 64, 599-607	7.9	11
159	High-Efficiency Thickness-Insensitive Organic Solar Cells with an Insulating Polymer. *ACS Applied Materials & Interfaces*, **2021**, 13, 11134-11143	9.5	5
158	A Well-Mixed Phase Formed by Two Compatible Non-Fullerene Acceptors Enables Ternary Organic Solar Cells with Efficiency over 18.6. *Advanced Materials*, **2021**, 33, e2101733	24	145
157	Trap State Induced Recombination Effects on Indoor Organic Photovoltaic Cells. *ACS Energy Letters*, **2021**, 6, 3203-3211	20.1	11
156	Stiffening the Pb-X Framework through a π-Conjugated Small-Molecule Cross-Linker for High-Performance Inorganic CsPbIBr Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 40489-40501	9.5	6
155	Single-Junction Organic Photovoltaic Cell with 19% Efficiency. *Advanced Materials*, **2021**, 33, e2102420	24	302
154	Reduced non-radiative charge recombination enables organic photovoltaic cell approaching 19% efficiency. *Joule*, **2021**, 5, 2408-2419	27.8	144
153	High performance indoor light harvesters with a wide-gap donor polymer PBDB-T. *Organic Electronics*, **2021**, 98, 106289	3.5	2
152	CdSe quantum dot organic solar cells with improved photovoltaic performance. *Journal Physics D: Applied Physics*, **2021**, 54, 115504	3	1

151	Boosting charge and thermal transport □role of insulators in stable and efficient n-type polymer transistors. *Journal of Materials Chemistry C*, **2021**, 9, 12281-12290	7.1	2
150	A sandwich-like structural model revealed for quasi-2D perovskite films. *Journal of Materials Chemistry C*, **2021**, 9, 5362-5372	7.1	4
149	Recent Progress of Organic Solar Cells with Insulating Polymers. *Solar Rrl*, **2020**, 4, 2070124	7.1	9
148	3D Charge Transport Pathway in Organic Solar Cells via Incorporation of Discotic Liquid Crystal Columns. *Solar Rrl*, **2020**, 4, 2070056	7.1	0
147	Revealing the Role of Methylammonium Chloride for Improving the Performance of 2D Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 25980-25990	9.5	24
146	3D Charge Transport Pathway in Organic Solar Cells via Incorporation of Discotic Liquid Crystal Columns. *Solar Rrl*, **2020**, 4, 2000047	7.1	12
145	Reduced graphene oxide assisted charge separation and serving as transport pathways in planar perovskite photodetector. *Organic Electronics*, **2020**, 81, 105663	3.5	1
144	Multiple Temporal-Scale Photocarrier Dynamics Induced by Synergistic Effects of Fluorination and Chlorination in Highly Efficient Nonfullerene Organic Solar Cells. *Solar Rrl*, **2020**, 4, 1900552	7.1	10
143	Steric Poly(diarylfluorene-co-benzothiadiazole) for Efficient Amplified Spontaneous Emission and Polymer Light-Emitting Diodes: Benefit from Preventing Interchain Aggregation and Polaron Formation. *Advanced Optical Materials*, **2020**, 8, 1901616	8.1	5
142	A novel ZnS/SiO2 double passivation layers for the CdS/CdSe quantum dots co-sensitized solar cells based on zinc titanium mixed metal oxides. *Solar Energy Materials and Solar Cells*, **2020**, 208, 110380	6.4	9
141	Helical-chiroptical nanowires generated orbital angular momentum for the detection of circularly polarized light. *Applied Physics Letters*, **2020**, 116, 053301	3.4	11
140	Modification of Hole Transport Layers for Fabricating High Performance Non-fullerene Polymer Solar Cells. *Chinese Journal of Chemistry*, **2020**, 38, 817-822	4.9	8
139	High-Performance Ternary Organic Solar Cells with Morphology-Modulated Hole Transfer and Improved Ultraviolet Photostability. *Solar Rrl*, **2020**, 4, 2000165	7.1	15
138	Energy Loss in Organic Solar Cells: Mechanisms, Strategies, and Prospects. *Solar Rrl*, **2020**, 4, 2000130	7.1	36
137	Bulk-Heterojunction with Long-Range Ordering: C Single-Crystal with Incorporated Conjugated Polymer Networks. *Journal of the American Chemical Society*, **2020**, 142, 1630-1635	16.4	19
136	Recent Progress of Organic Solar Cells with Insulating Polymers. *Solar Rrl*, **2020**, 4, 2000539	7.1	14
135	Ferrocene as a highly volatile solid additive in non-fullerene organic solar cells with enhanced photovoltaic performance. *Energy and Environmental Science*, **2020**, 13, 5117-5125	35.4	46
134	Organic Multiferroic Magnetoelastic Complexes. *Advanced Materials*, **2020**, 32, e2003293	24	9

133	Effect of the Energy Offset on the Charge Dynamics in Nonfullerene Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 43984-43991	9.5	10
132	Solution-Processed Organic Solar Cells with High Open-Circuit Voltage of 1.3 V and Low Non-Radiative Voltage Loss of 0.16 V. *Advanced Materials*, **2020**, 32, e2002122	24	96
131	The photovoltaic performance of CdS/CdSe quantum dots co-sensitized solar cells based on zinc titanium mixed metal oxides. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 115, 113669	3	11
130	Hydrophilic Fullerene Derivative Doping in Active Layer and Electron Transport Layer for Enhancing Oxygen Stability of Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 1900249	7.1	6
129	Multiple Temporal-Scale Photocarrier Dynamics Induced by Synergistic Effects of Fluorination and Chlorination in Highly Efficient Nonfullerene Organic Solar Cells. *Solar Rrl*, **2020**, 4, 2070046	7.1	1
128	Effects of various donor:acceptor blend ratios on photophysical properties in non-fullerene organic bulk heterojunctions. *Chinese Chemical Letters*, **2019**, 30, 995-999	8.1	10
127	Ternary organic solar cells based on two compatible PDI-based acceptors with an enhanced power conversion efficiency. *Journal of Materials Chemistry A*, **2019**, 7, 3552-3557	13	44
126	Preparation and photovoltaic properties of dye-sensitized solar cells based on zinc titanium mixed metal oxides. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 568, 59-65	5.1	14
125	Competition between singlet fission and singlet exciton dissociation at the interface in TIPS-pentacene:IT-4F blend. *Organic Electronics*, **2019**, 71, 296-302	3.5	6
124	Controllable Growth of Lead-Free All-Inorganic Perovskite Nanowire Array with Fast and Stable Near-Infrared Photodetection. *Journal of Physical Chemistry C*, **2019**, 123, 17566-17573	3.8	49
123	Unraveling the unstable amorphous phase evolution effect on burn-in loss in polymer-fullerene solar cells. *Organic Electronics*, **2019**, 71, 156-163	3.5	5
122	Quantitatively Characterized Crystallization Effect on Recombination Energy Loss in Non-Fullerene Organic Solar Cells. *Journal of Physical Chemistry C*, **2019**,	3.8	8
121	Effective Exciton Dissociation and Reduced Charge Recombination in Thick-Film Organic Solar Cells via Incorporation of Insulating Polypropylene. *Solar Rrl*, **2019**, 3, 1900087	7.1	13
120	Ternary Organic Solar Cells with Small Nonradiative Recombination Loss. *ACS Energy Letters*, **2019**, 4, 1196-1203	20.1	84
119	Organic Chiral Charge Transfer Magnets. *ACS Nano*, **2019**, 13, 4705-4711	16.7	16
118	Observing electron transport and percolation in selected bulk heterojunctions bearing fullerene derivatives, non-fullerene small molecules, and polymeric acceptors. *Nano Energy*, **2019**, 64, 103950	17.1	25
117	Resolving the Mechanisms of Photocurrent Improvement in Ternary Organic Solar Cells. *Journal of Physical Chemistry C*, **2019**, 123, 18294-18302	3.8	15
116	Enhanced Electron Transport and Heat Transfer Boost Light Stability of Ternary Organic Photovoltaic Cells Incorporating Non-Fullerene Small Molecule and Polymer Acceptors. *Advanced Electronic Materials*, **2019**, 5, 1900497	6.4	30

115	Saturated antisolvent pressure induced perylene diimide nanowires with high degree of electron delocalization. *Organic Electronics*, **2019**, 75, 105382	3.5	1
114	Magnetic and Electric Control of Circularly Polarized Emission through Tuning Chirality-Generated Orbital Angular Momentum in Organic Helical Polymeric Nanofibers. *Advanced Materials*, **2019**, 31, e1904857	24	14
113	Effect of the third component on charge transfer character in ternary organic solar cells with a cascade-type electronic structure. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2019**, 383, 126001	2.3	4
112	Hole Transfer Originating from Weakly Bound Exciton Dissociation in Acceptor-Donor-Acceptor Nonfullerene Organic Solar Cells. *Journal of Physical Chemistry Letters*, **2019**, 10, 7100-7106	6.4	26
111	Spin-Photon Coupling in Organic Chiral Crystals. *Nano Letters*, **2019**, 19, 9008-9012	11.5	7
110	Stress-induced optical waveguides written by an ultrafast laser in Nd, Y co-doped SrF crystals. *Applied Optics*, **2019**, 58, 984-990	1.7	2
109	Study of femtosecond laser writing in the bulk of Nd3+, Y3+ co-doped CaF2 crystals. *OSA Continuum*, **2019**, 2, 151	1.4	2
108	Surface modification via self-assembling large cations for improved performance and modulated hysteresis of perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 6793-6800	13	35
107	Ternary Organic Solar Cells with Efficiency >16.5% Based on Two Compatible Nonfullerene Acceptors. *Advanced Materials*, **2019**, 31, e1905645	24	190
106	The effect of CuS counter electrodes for the CdS/CdSe quantum dot co-sensitized solar cells based on zinc titanium mixed metal oxides. *Journal of Materials Science*, **2019**, 54, 4884-4892	4.3	13
105	Rationalizing device performance of perylenediimide derivatives as acceptors for bulk-heterojunction organic solar cells. *Organic Electronics*, **2019**, 65, 156-161	3.5	18
104	Förster resonance energy transfer and morphology optimization for high-performance ternary organic photodetectors. *Organic Electronics*, **2019**, 67, 146-152	3.5	16
103	Enhanced light-harvesting of benzodithiophene conjugated porphyrin electron donors in organic solar cells. *Journal of Materials Chemistry C*, **2019**, 7, 380-386	7.1	9
102	Modulating the morphology and molecular arrangement via the well-compatible polymer donor in multiple working mechanisms interwined ternary organic solar cells. *Organic Electronics*, **2019**, 66, 13-23	3.5	10
101	Efficient Ternary Organic Solar Cells Enabled by the Integration of Nonfullerene and Fullerene Acceptors with a Broad Composition Tolerance. *Advanced Functional Materials*, **2019**, 29, 1807006	15.6	70
100	Versatile Ternary Approach for Novel Organic Solar Cells: A Review. *Solar Rrl*, **2019**, 3, 1800263	7.1	94
99	Förster resonance energy transfer and charge transfer dynamics in ternary organic nanoparticles. *Organic Electronics*, **2018**, 57, 140-145	3.5	5
98	Balanced Electric Field Dependent Mobilities: A Key to Access High Fill Factors in Organic Bulk Heterojunction Solar Cells. *Solar Rrl*, **2018**, 2, 1700239	7.1	38

97	Regulating the vertical phase distribution by fullerene-derivative in high performance ternary organic solar cells. *Nano Energy*, **2018**, 46, 81-90	17.1	108
96	Suppressing Thermally Induced Fullerene Aggregation in Organic Solar Cells by Employing Plastic Network. *Journal of Physical Chemistry C*, **2018**, 122, 9843-9851	3.8	21
95	Fully doctor-bladed planar heterojunction perovskite solar cells under ambient condition. *Organic Electronics*, **2018**, 58, 153-158	3.5	63
94	Exploring charge transfer processes and crystallization dynamics in donor-acceptor crystals. *Organic Electronics*, **2018**, 58, 105-110	3.5	4
93	Designing a ternary photovoltaic cell for indoor light harvesting with a power conversion efficiency exceeding 20%. *Journal of Materials Chemistry A*, **2018**, 6, 8579-8585	13	95
92	Optimizing the Crystallinity and Phase Separation of PTB7:PC71BM Films by Modified Graphene Oxide. *Journal of Physical Chemistry C*, **2018**, 122, 2572-2581	3.8	12
91	Carbon nanotubes as the effective charge transport pathways for planar perovskite photodetector. *Organic Electronics*, **2018**, 59, 156-163	3.5	15
90	The prospective photo anode composed of zinc tin mixed metal oxides for the dye-sensitized solar cells. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 547, 111-116	5.1	9
89	Recent Advances of Plasmonic Organic Solar Cells: Photophysical Investigations. *Polymers*, **2018**, 10,	4.5	49
88	Ferroelectric Polarization in CsPbI3/CsSnI3 Perovskite Heterostructure. *Journal of Physical Chemistry C*, **2018**, 122, 17820-17824	3.8	10
87	Erbium (III) tris(8-hydroxyquinoline) doped zinc oxide interfacial layer for improved performance of polymer solar cells. *Organic Electronics*, **2018**, 62, 65-71	3.5	12
86	Low resistivity phase-pure n-type Cu2O films realized via post-deposition nitrogen plasma treatment. *Journal of Alloys and Compounds*, **2018**, 769, 484-489	5.7	10
85	Morphology Control Enables Efficient Ternary Organic Solar Cells. *Advanced Materials*, **2018**, 30, e1803045	21	197
84	Anisotropic Magnetoelectric Coupling and Cotton-Mouton Effects in the Organic Magnetic Charge-Transfer Complex Pyrene-FTCNQ. *ACS Applied Materials & Interfaces*, **2018**, 10, 44654-44659	9.5	31
83	Functionalized Graphene Oxide Enables a High-Performance Bulk Heterojunction Organic Solar Cell with a Thick Active Layer. *Journal of Physical Chemistry Letters*, **2018**, 9, 6238-6248	6.4	29
82	Monolithic perovskite/Si tandem solar cells exceeding 22% efficiency via optimizing top cell absorber. *Nano Energy*, **2018**, 53, 798-807	17.1	56
81	Role of Central Metal Ions in 8-Hydroxyquinoline-Doped ZnO Interfacial Layers for Improving the Performance of Polymer Solar Cells. *Advanced Materials Interfaces*, **2018**, 5, 1801172	4.6	12
80	Utilizing magnetic field to study the impact of intramolecular charge transfers on the open-circuit voltage of organic solar cells. *Applied Physics Letters*, **2018**, 113, 093301	3.4	2

79	Integrating Ultrathin Bulk-Heterojunction Organic Semiconductor Intermediary for High-Performance Low-Bandgap Perovskite Solar Cells with Low Energy Loss. *Advanced Functional Materials*, **2018**, 28, 1804427	15.6	79
78	Optical Helicity-Manipulated Photocurrents and Photovoltages in Organic Solar Cells. *Journal of Physical Chemistry C*, **2018**, 122, 12566-12571	3.8	1
77	Enhancing light harvesting and charge transport in organic solar cells via integrating lanthanide-doped upconversation materials. *Journal Physics D: Applied Physics*, **2018**, 51, 265105	3	7
76	Unveiling the important role of non-fullerene acceptors crystallinity on optimizing nanomorphology and charge transfer in ternary organic solar cells. *Organic Electronics*, **2018**, 62, 643-652	3.5	7
75	Chemically driven supramolecular self-assembly of porphyrin donors for high-performance organic solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 14675-14680	13	20
74	Poly(3-hexylthiophene) coated graphene oxide for improved performance of bulk heterojunction polymer solar cells. *Organic Electronics*, **2017**, 44, 149-158	3.5	20
73	Improved compatibility of DDAB-functionalized graphene oxide with a conjugated polymer by isocyanate treatment. *RSC Advances*, **2017**, 7, 17633-17639	3.7	9
72	Dual Förster resonance energy transfer effects in non-fullerene ternary organic solar cells with the third component embedded in the donor and acceptor. *Journal of Materials Chemistry A*, **2017**, 5, 12120-12130	13	84
71	Room-temperature subnanosecond waveguide lasers in Nd:YVO Q-switched by phase-change VO: A comparison with 2D materials. *Scientific Reports*, **2017**, 7, 46162	4.9	7
70	Laser-induced crystallization and conformation control of poly(3-hexylthiophene) for improving the performance of organic solar cells. *Organic Electronics*, **2017**, 49, 157-164	3.5	8
69	Aqueous self-assembled perovskite microfibers for sensitive photodetectors. *Organic Electronics*, **2017**, 48, 106-111	3.5	12
68	Thick-Film High-Performance Bulk-Heterojunction Solar Cells Retaining 90% PCEs of the Optimized Thin Film Cells. *Advanced Electronic Materials*, **2017**, 3, 1700007	6.4	29
67	Improving the Compatibility of Donor Polymers in Efficient Ternary Organic Solar Cells via Post-Additive Soaking Treatment. *ACS Applied Materials & Interfaces*, **2017**, 9, 618-627	9.5	44
66	Optically Controlled Magnetization and Magnetoelectric Effect in Organic Multiferroic Heterojunction. *Advanced Optical Materials*, **2017**, 5, 1700644	8.1	9
65	Photophysical Behaviors at Interfaces between Poly(3-Hexylthiophene) and Zinc Oxide Nanostructures. *Materials Transactions*, **2017**, 58, 1106-1110	1.3	1
64	Investigation of the dye-sensitized solar cell designed by a series of mixed metal oxides based on ZnAl-layered double hydroxide. *Applied Physics A: Materials Science and Processing*, **2017**, 123, 1	2.6	16
63	Spatially Resolved Photophysical Dynamics in Perovskite Microplates Fabricated Using an Antisolvent Treatment. *Journal of Physical Chemistry C*, **2017**, 121, 26250-26255	3.8	14
62	Systematic control of optical features in aluminosilicate glass waveguides using direct femtosecond laser writing. *Optical Materials*, **2017**, 72, 501-507	3.3	4

61	Molecular packing correlated fluorescence in TIPS-pentacene films. *Organic Electronics*, **2017**, 49, 340-346	3.5	9
60	Structural and optical properties of conjugated polymer and carbon-based non-fullerene material blend films for photovoltaic applications. *Optical Materials Express*, **2017**, 7, 687	2.6	9
59	Femtosecond laser processing induced low loss waveguides in multicomponent glasses. *Optical Materials Express*, **2017**, 7, 3580	2.6	8
58	An Obvious Improvement in the Performance of Ternary Organic Solar Cells with "Guest" Donor Present at the "Host" Donor/Acceptor Interface. *ACS Applied Materials & Interfaces*, **2016**, 8, 23212-21	8.5	40
57	Performance Enhancement in Polymer-Based Organic Optoelectronic Devices Enabled By Discontinuous Metal Interlayer. *IEEE Journal of Photovoltaics*, **2016**, 6, 1522-1529	3.7	3
56	Charge transfer dynamics in poly(3-hexylthiophene): nanodiamond blend films. *Diamond and Related Materials*, **2016**, 64, 8-12	3.5	8
55	Performance improvement of TiO2/Ag/TiO2multilayer transparent conducting electrode films for application on photodetectors. *Journal Physics D: Applied Physics*, **2016**, 49, 115108	3	16
54	Green up-conversion and near-infrared luminescence of femtosecond-laser-written waveguides in Er3+, MgO co-doped nearly stoichiometric LiNbO3 crystal. *Optics Express*, **2016**, 24, 25482-25490	3.3	15
53	Efficient photoinduced charge transfer in chemically-linked organic-metal Ag-P3HT nanocomposites. *Optical Materials Express*, **2016**, 6, 3063	2.6	3
52	Impact of solvent additive on exciton dissociation in P3HT : EP-PDI blend film via controlling morphology. *Journal Physics D: Applied Physics*, **2016**, 49, 255502	3	3
51	Femtosecond Laser Writing of Optical-Lattice-Like Cladding Structures for Three-Dimensional Waveguide Beam Splitters in LiNbO3 Crystal. *Journal of Lightwave Technology*, **2016**, 34, 3587-3591	4	20
50	Femtosecond laser written optical waveguides in z-cut MgO:LiNbO3 crystal: Fabrication and optical damage investigation. *Optical Materials*, **2016**, 57, 169-173	3.3	13
49	Effects of Processing Solvent on the Photophysics and Nanomorphology of Poly(3-butyl-thiophene) Nanowires:PCBM Blends. *Journal of Physical Chemistry Letters*, **2016**, 7, 1872-9	6.4	15
48	Optimization of waveguide structures for beam splitters fabricated in fused silica by direct femtosecond-laser inscription. *Optics and Laser Technology*, **2015**, 74, 60-64	4.2	5
47	Homogeneous phase separation in polymer:fullerene bulk heterojunction organic solar cells. *Organic Electronics*, **2015**, 25, 266-274	3.5	30
46	Three-dimensional femtosecond laser fabrication of waveguide beam splitters in LiNbO_3 crystal. *Optical Materials Express*, **2015**, 5, 1274	2.6	33
45	Charge transfer from poly(3-hexylthiophene) to graphene oxide and reduced graphene oxide. *RSC Advances*, **2015**, 5, 89515-89520	3.7	65
44	Waveguides and proportional beam splitters in bulk poly(methyl methacrylate) produced by direct femtosecond-laser inscription. *Optical Materials*, **2015**, 49, 110-115	3.3	8

43	Förster Resonance Energy Transfer and Energy Cascade in Broadband Photodetectors with Ternary Polymer Bulk Heterojunction. *Journal of Physical Chemistry C*, **2015**, 119, 21913-21920	3.8	53
42	Effect of alkyl side-chain length on the photophysical, morphology and photoresponse properties of poly(3-alkylthiophene). *Journal Physics D: Applied Physics*, **2015**, 48, 485501	3	5
41	Preparation of Biomorphic TiO2 Ceramics from Rattan Templates. *BioResources*, **2015**, 10,	1.3	2
40	Quantifying phase separation and interfacial area in organic photovoltaic bulk heterojunction processed with solvent additives. *Chemical Physics*, **2015**, 457, 7-12	2.3	5
39	Purified dispersions of graphene in a nonpolar solvent via solvothermal reduction of graphene oxide. *Chemical Communications*, **2015**, 51, 3824-7	5.8	14
38	Surfactant-mediated formation of polymeric microlenses from interfacial microdroplets. *Soft Matter*, **2014**, 10, 957-64	3.6	20
37	Quasiparticle electronic structure and optical absorption of diamond nanoparticles from ab initio many-body perturbation theory. *Journal of Chemical Physics*, **2014**, 140, 214315	3.9	6
36	Super-resolution optical imaging of binary colloidal assemblies. *International Journal of Nanotechnology*, **2014**, 11, 610	1.5	1
35	The structure and optical properties of regio-regular poly(3-hexylthiophene) and carboxylic multi-walled carbon nanotubes composite films. *Journal Physics D: Applied Physics*, **2014**, 47, 505502	3	9
34	Intrinsic and Extrinsic Fluorescence in Carbon Nanodots: Ultrafast Time-Resolved Fluorescence and Carrier Dynamics. *Advanced Optical Materials*, **2013**, 1, 173-178	8.1	126
33	DEEP-UV CONFOCAL FLUORESCENCE IMAGING AND SUPER-RESOLUTION OPTICAL MICROSCOPY OF BIOLOGICAL SAMPLES. *Journal of Innovative Optical Health Sciences*, **2012**, 05, 1250025	1.2	6
32	Spatial Fluorescence Inhomogeneities in Light-Emitting Conjugated Polymer Films. *Journal of Physical Chemistry Letters*, **2011**, 2, 1520-1525	6.4	50
31	Conformational and photophysical changes in conjugated polymers exposed to Couette shear. *Journal of Physical Chemistry B*, **2011**, 115, 6838-42	3.4	2
30	Polymer Compression in Shear Flow. *Journal of Physical Chemistry Letters*, **2010**, 1, 1912-1916	6.4	20
29	Flow-Rolling Alignment in Friction-Transferred Light-Emitting Conjugated Polymer Thin Films. *Macromolecules*, **2010**, 43, 10475-10480	5.5	14
28	Conformational Changes and Photophysical Behavior in Poly[2-methoxy-5-(2?-ethyl-hexyloxy)-1,4-phenylene vinylene] Thin Films Cast under an Electric Field. *Journal of Physical Chemistry C*, **2009**, 113, 11657-11661	3.8	28
27	Aggregation of water-soluble conjugated polymers in Couette shear flow. *Journal of Physical Chemistry B*, **2009**, 113, 13138-41	3.4	5
26	Molar Mass Determination of Water-Soluble Light-Emitting Conjugated Polymers by Fluorescence-Based Analytical Ultracentrifugation. *Macromolecules*, **2009**, 42, 2737-2740	5.5	9

25	Semitransparent passive matrix organic light-emitting displays. *Journal of Materials Science: Materials in Electronics*, **2007**, 18, 913-918	2.1	2
24	High-performance low-temperature transparent conducting aluminum-doped ZnO thin films and applications. *Journal of Crystal Growth*, **2006**, 287, 44-47	1.6	74
23	Toward Novel Flexible Display - Top-Emitting OLEDs on Al-Laminated PET Substrates. *Proceedings of the IEEE*, **2005**, 93, 1440-1446	14.3	5
22	A general low-temperature route for large-scale fabrication of highly oriented ZnO nanorod/nanotube arrays. *Journal of the American Chemical Society*, **2005**, 127, 2378-9	16.4	452
21	Hyperbranched Blue to Red Light-Emitting Polymers with Tetraarylsilyl Cores: Synthesis, Optical and Electroluminescence Properties, and ab Initio Modeling Studies. *Macromolecules*, **2005**, 38, 4157-4168	5.5	47
20	Flexible top-emitting electroluminescent devices on polyethylene terephthalate substrates. *Applied Physics Letters*, **2005**, 86, 153508	3.4	79
19	Hyperbranched Blue-Light-Emitting Alternating Copolymers of Tetrabromoarylmethane/Silane and 9,9-Dihexylfluorene-2,7-diboronic Acid. *Macromolecules*, **2004**, 37, 5965-5970	5.5	74
18	Emission properties of laser ablation of SnO2: Sb transparent conducting film and KTiOPO4 crystal. *Optics and Laser Technology*, **2003**, 35, 475-480	4.2	2
17	Comparison of the electrical and optical properties for SnO2:Sb films deposited on polyimide and glass substrates. *Applied Surface Science*, **2003**, 214, 208-213	6.7	39
16	Characterization of GaN films grown on silicon (1 1 1) substrates. *Physica B: Condensed Matter*, **2003** , 325, 230-234	2.8	8
15	Preparation and properties of GaN nanostructures by post-nitridation technique. *Physica B: Condensed Matter*, **2003**, 334, 287-291	2.8	8
14	Structure and luminescence of GaN films by sputtering post-annealing-reaction technique. *Diamond and Related Materials*, **2003**, 12, 1402-1405	3.5	3
13	Comparison of the properties for ZnO:Al films deposited on polyimide and glass substrates. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 90, 50-54	3.1	35
12	Electrical and optical properties of SnO2:Sb films prepared on polyimide substrate by r.f. bias sputtering. *Applied Surface Science*, **2002**, 189, 157-161	6.7	15
11	Preparation and structural properties for GaN films grown on Si (1 1 1) by annealing. *Applied Surface Science*, **2002**, 193, 254-260	6.7	45
10	Investigation of preparation and characterization of GaN films on sapphire (0001) substrates. *Applied Surface Science*, **2002**, 202, 295-300	6.7	4
9	Bias voltage dependence of properties for ZnO:Al films deposited on flexible substrate. *Surface and Coatings Technology*, **2002**, 161, 58-61	4.4	34
8	RF magnetron sputtering SnO2: Sb films deposited on organic substrates. *Solid State Communications*, **2002**, 121, 345-349	1.6	16

7	Thickness dependence of properties of SnO2:Sb films deposited on flexible substrates. *Applied Surface Science*, **2002**, 191, 313-318	6.7	36
6	Thickness dependence of structural, optical and electrical properties of ZnO:Al films prepared on flexible substrates. *Applied Surface Science*, **2001**, 183, 137-142	6.7	127
5	Polycrystalline LaFe3CoSb12 material manufactured by melt-freeze-annealing method. *Progress in Crystal Growth and Characterization of Materials*, **2000**, 40, 285-291	3.5	2
4	Benzo[1,2-b:4,5-b?]difuran Based Polymer Donor for High-Efficiency (>16%) and Stable Organic Solar Cells. *Advanced Energy Materials*,2103684	21.8	7
3	Ternary Strategy Enabling High-Efficiency Rigid and Flexible Organic Solar Cells with Reduced Non-radiative Voltage Loss. *Energy and Environmental Science*,	35.4	17
2	17% efficiency all-small-molecule organic solar cells enabled by nanoscale phase separation with a hierarchical branched structure. *Energy and Environmental Science*,	35.4	39
1	Ternary-Assisted Sequential Solution Deposition Enables Efficient All-Polymer Solar Cells with Tailored Vertical-Phase Distribution. *Advanced Functional Materials*,2200478	15.6	8